



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/528,761

11/15/2005

Dieter Bieker

037068.55840US

4659

23911 7590 07/03/2008
CROWELL & MORING LLP
INTELLECTUAL PROPERTY GROUP
P.O. BOX 14300
WASHINGTON, DC 20044-4300

EXAMINER

RODRIGUEZ, PAMELA

ART UNIT

PAPER NUMBER

3683

MAIL DATE

DELIVERY MODE

07/03/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/528,761	Applicant(s) BIEKER ET AL.	
	Examiner Pam Rodriguez	Art Unit 3683	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 31-60 is/are pending in the application.
 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 31-35, 37-46 and 49-60 is/are rejected.
- 7) ☒ Claim(s) 36, 47 and 48 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 March 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>03/22/05 & 11/15/05</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Specification

1. The Substitute Specification filed March 22, 2005 has been approved and entered.
2. The abstract of the disclosure is objected to because in line 2 the word "said" is used and in line 7 the word "means" is used. Correction is required. See MPEP § 608.01(b).

Claim Objections

3. Claims 37 and 60 are objected to because of the following informalities: in line 4 of Claim 37, the word "which" should be deleted and in line 3 of Claim 60, the numeral "81" should be deleted. Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
5. Claims 37-40, 43-46, 49, 50, 52-54, and 56-60 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In line 4 of Claim 37 and in lines 1-2 of Claim 38, the term "the intermediate elements" is indefinite. Only one intermediate element was claimed previously.

Art Unit: 3683

Therefore, it is unclear if applicant is attempting to claim one or more intermediate elements.

Claims 39, 40, 43-46, and 56-60 are rejected merely due to their dependency from Claims 37 or 38. However, applicant is cautioned to have the term "intermediate element(s)" consistent throughout these dependent claims as well.

In line 2 of Claim 49, the term "the conical surface" is indefinite. It is unclear which of the plurality of conical surfaces previously claimed in Claim 47, from which Claim 49 depends therefrom, that applicant is referring to here.

Claim 50 is rejected merely due to its dependency from Claim 49.

In line 3 of Claim 52, the term "a support bearing ring" is indefinite. The same bearing ring was previously recited in Claim 47, from which this claim depends therefrom.

Claims 53 and 54 are rejected merely due to their dependency from Claim 52.

Claim 60 recites the limitation "the pressure chamber" in the last line of the claim. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8. Claims 31-35, 37-43, 55, 59, and 60 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,582,273 to Baumgartner et al in view of German Patent No. DE 3244745 to Brunner et al.

Regarding Claim 31, Baumgartner et al disclose a pneumatic disc brake for utility vehicles (see Figures 1 and 2) having most all the features of the instant invention including: a caliper 2 straddling a brake disc 1, a brake application device 4 arranged in the caliper 2 (see Figure 1), at least one adjusting device 74 to compensate for brake pad wear, and wherein the at least one adjusting device 74 has at least one adjusting unit 72/73.

However, Baumgartner et al do not disclose that the adjusting unit is actuated independently of the brake application device and directly via compressed air.

Brunner et al are relied upon merely for their teachings of a brake assembly (see the Figure) having an adjusting unit 7 being actuated independently of a brake

Art Unit: 3683

application device and directly via compressed air (see both the translated abstract submitted by applicant and the examiner provided translated abstract).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have provided the disc brake of Baumgartner et al with an independently actuated adjusting unit utilizing compressed air as taught by Brunner et al so that an alternate means of initiating adjustment for wear of the brake pads can be performed regardless of whether a braking action is taking place.

Regarding Claims 32 and 33, see Figures 1 and 2 of Baumgartner et al.

Regarding Claims 34 and 35, see adjusting units 72/73 of Baumgartner et al which are both arranged on each side (i.e. the left and right sides) of one side of the brake disc 1 (see also column 5 lines 40-56).

Regarding Claim 37, see rotary lever 4 in Baumgartner et al having two traverse-type lateral ends that act upon one intermediate element 7, respectively, and further wherein the element 7 has a recess on its side facing the brake disc 1 (see Figure 1 of Baumgartner et al and the recess in element 7 to encompass element 6).

Regarding Claim 38, see Figures 1 and 2 of Baumgartner et al.

Regarding Claim 39, Baumgartner et al further disclose that the intermediate element 7 is supported by way of plunger rods (see Figure 2 and the outer ends of element 73 contacting elements 70 and 71) on pistons 70 and 71 that are axially movable in the caliper 2.

Regarding Claim 40, see Figure 2 of Baumgartner et al.

Regarding Claim 41, Baumgartner et al further disclose that each adjusting unit 72/73 includes one piston 70 or 71 and one plunger rod (see the ends of element 73 contacting pistons 70 and 71), which are screwed to one another by way of a non-selflocking thread (see Figure 2 and the threads of element 73 in which these threads effectively hold the mating parts together but are not locked together).

Regarding Claim 42, see column 7 lines 1-29 of Baumgartner et al.

Regarding Claim 43, see Figure 2 of Baumgartner et al.

Regarding Claim 55, see Figure 2 of Baumgartner et al where adjusting units 72/73 are identical in construction with the exception of pressure rollers 30 and intermediate pieces (any of the components 78,92,or 76) provided only on the application side of the disc brake.

Regarding Claim 59, see Figure 2 of Baumgartner et al and the bellows surrounding the lower ends of pistons 70 and 71.

Regarding Claim 60, see Figure 2 of Baumgartner et al and what appears to be a seal nearest element numeral 91.

Allowable Subject Matter

9. Claim 36, 47, and 48 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

10. Claims 44-46, 49-54, and 56-58 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent No. 4,094,388 to Falk and PG Publication No. 2007/0062767 to Baumgartner et al both disclose pneumatic disc brakes with adjusting devices similar to applicant's.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Pam Rodriguez whose telephone number is 571-272-7122. The examiner can normally be reached on Tuesdays 5 AM -11 AM and Wednesdays 5 AM -4 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rob Siconolfi can be reached on 571-272-7124. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3683

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Pam Rodriguez
Primary Examiner
Art Unit 3683

/Pam Rodriguez/
Primary Examiner, Art Unit 3683
07/02/08